Southwestern Bell Corporation

January 31, 1995

Michael W. Bennett
Director
Federal Regulatory

Ex Parte

Mr. William F. Caton
Acting Secretary
Federal Communications Commission
1919 M Street, N.W.
Room 222
Washington, DC 20554

Re: ET Docket No. 94-32 - Allocation of Spectrum Below 5 GHz Transferred from Federal Government Use

Dear Mr. Caton:

In accordance with Commission rules, Southwestern Bell Telephone Company (SWBT) hereby makes this ex parte filing in the above docket.

In this proceeding, the Commission will allocate to new applications 50 megahertz (MHz) of radio spectrum that is to be transferred from the federal government for use by the private sector. The Commission's stated objective is to ensure that the reallocated spectrum is put to its best and most valued use and that the greatest public benefit is attained. With the comment cycle now concluded, SWBT believes the record clearly indicates that the best proposal for attaining the Commission's stated goal, is the allocation of the 2390-2400 MHz band, paired with the 2300-2310 MHz band, for deployment of wireless local loop (WLL).

Clearly, WLL is the right service application for this spectrum.. The spectrum in question is unique since it is both below 3 GHz and can be paired. The other applications proposed for this spectrum can use contiguous, unpaired spectrum blocks, and can thus be accommodated in other segments of spectrum under review in this docket or can utilize spectrum which becomes available later (the additional 150 MHz). This is not true for wireless local loop. WLL requires paired spectrum. For example, unlicensed PCS applications can be accommodated in the 4660-4685 MHz segment of the reallocated spectrum (therefore, the "promise" of additional spectrum for unlicensed PCS use that the Commission made in its Memorandum Opinion and Order in

1401 I Street, N.W.
Suite 1100
Washington, DC 20005

Phone 202 326-8890

Docket 90-314, released June 13, 1994, can be fulfilled). If this portion of spectrum is not made available for WLL, there is no viable alternative in the foreseeable future.

As fully explained in SWBT's Comments and Reply Comments, WLL would replace the "drop wire" as well as a portion of the telephone distribution plant, with a low power microcellular radio system which can be deployed in urban, suburban and rural areas. WLL can be used to:

provide new access lines and to rehabilitate aging plant;

allow customer traffic to be concentrated "in the air" resulting in more efficient use of the telephone network through the use of shared resources;

permit quicker recovery of service in the event of a natural disaster;

cause less inconvenience to customers, since for example, it would no longer be required to dig through established yards and streets to rehabilitate facilities; and

economically provide service to unserved and underserved areas.

Moreover, the benefits of WLL can be realized while allowing customers to continue using existing telephone sets and standard telephone inside wiring. In other words, the use of WLL technology will be transparent to the customer. WLL clearly benefits the public by reducing the cost of the telephone infrastructure, providing the capability to offer new services and also causing less customer inconvenience.

Some parties filing Comments in this proceeding request that the Commission ignore the substantial public benefits of WLL and have urged the Commission to reject the WLL proposal. For example, amateur radio users generally oppose WLL because SWBT candidly stated in its pleadings that it would be "problematic" for WLL to share the entire subject spectrum with amateur radio users. Contrary to the assertions of some amateur radio users, "problematic" does not mean that it is impossible to accommodate the amateur radio community. SWBT recognizes, as the Commission must recognize, that

reallocating this spectrum for any of the applications proposed in this proceeding will affect existing amateur radio use of this spectrum. Unlike most other parties, SWBT has suggested several alternative proposals to reasonably accommodate the amateur radio community.

Since Southwestern Bell's initial proposal to accommodate amateur radio users, submitted in the Notice of Inquiry (NOI) phase of this proceeding, was not supported in the NPRM, SWBT has continued to analyze the issue. In Comments and Reply Comments filed in the NPRM, SWBT acknowledged that it would be "problematic" for WLL to share spectrum with amateur radio users on a "co-primary" basis. The amateur radio parties in this proceeding have indicated that the 2300-2310 and 2390-2400 MHz bands are largely reserved for future expansion of amateur services. Therefore, SWBT recommended that amateur radio users presently operating on a secondary basis in these bands be given exclusive use of the 2400-2410 MHz band. As a possible alternative, SWBT suggested that the 2303.5-2304.5 MHz band and the 2393.5-2394.5 MHz band be allocated to amateur radio users on a secondary basis (as currently exists) while allowing WLL to use the spectrum on a primary basis. However, if the Commission still has concerns with amateur radio users, SWBT now suggests that the 2303.5-2304.5 MHz band and the 2393.5-2394.5 MHz band be allocated to amateur radio users on a primary basis and the remaining 18 MHz of spectrum in the 2390-2400 MHz band and 2300-2310 MHz bands be allocated on a primary basis to WLL. This proposal was made to accommodate the weak signal work presently operating at 2304 MHz.

The record clearly reflects that at every stage of this proceeding, including this ex parte, SWBT has suggested proposals to accommodate the amateur radio community. While SWBT continues to believe that the record supports the allocation of the entire 2390-2400 MHz band, paired with the entire 2300-2310 MHz band for exclusive use of WLL, SWBT does not object to the Commission selecting one of the alternatives suggested above to accommodate amateur radio users.

Some segments of the amateur radio user community appear to support aeronautical audio and visual (AAVS) and unlicensed Data-PCS proposals (which both propose to use the same spectrum bands as WLL) based on an erroneous and mistaken belief that these offerings, which provide far less public benefit than WLL, would not disrupt amateur radio users. SWBT's research indicates that there is a significant likelihood that these applications would also

interfere with existing amateur radio use of the 2390-2400 MHz and 2300-2310 MHz spectrum bands. For example, as In-Flight notes in its Comments, an aircraft flying at 30,000 feet is within line of sight, and thus is a potential source of interference to, or may receive interference from, any amateur transceiver located within a 250-mile radius of the aircraft. Thus, interference-free sharing is by no means as simple as In-Flight claims. Proponents of unlicensed Data-PCS also claim their service can share spectrum with amateur radio users. Again, SWBT's understanding of the proposed usage (such as fast-scan television) of the 2390-2400 MHz band by amateur radio users indicates that they would likely receive harmful interference from unlicensed Data-PCS's use of this spectrum. In addition, any interfering source would be nearly impossible to locate and eliminate. Thus, sharing is again not as simple as many unlicensed Data-PCS proponents indicate.

As stated earlier, WLL is clearly the right service for this spectrum. It is unique in that it is both below 3 GHz and can be paired. No other candidate spectrum meets the needs of wireless local loop. The current BETRS allocation has limitations on proximity to urban centers and shares the spectrum with other uses which preclude its use in many rural applications, as well as all suburban or urban deployments. PCS spectrum is not a viable option due to the limited amount of spectrum which could be obtained (a maximum of 10 MHz in service areas where an affiliate company is the cellular provider), and the current rules which include mobility and buildout requirements that would not be met by a fixed service such as WLL.

Frequencies above 3 GHz present significant difficulties for a low-power non-line of sight application such as WLL. The propagation is more nearly line of sight, and with low antenna heights and low power, would result in poor signal coverage and potentially poor service quality.

SWBT also wishes to dispel any remaining notion that its WLL proposal would result in any form of a local exchange carrier (LEC) "set-aside". For example, some parties imply that WLL proponents are asking the Commission to grant an exclusive allocation to the existing wireline telephone companies. These parties are simply mistaken. SWBT seeks a service specific allocation, not a provider set-aside. Under SWBT's WLL proposal, **any party** (LEC, IXC, CAP, etc.) wishing to offer service in the defined

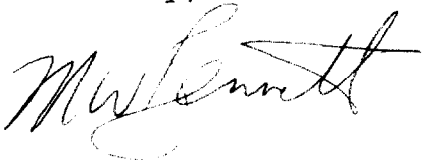
service area could obtain the spectrum and deploy WLL, and could do so in direct competition with the existing LEC's wireline network.

Finally, during our numerous ex parte meetings with commissioners and staff in this proceeding, a "competitive concern" was expressed regarding the WLL proposal in that there is only enough radio spectrum (20 MHz) to accommodate one licensed WLL provider. While it would be preferable to be able to accommodate multiple WLL licensees serving identical areas, the reality is that radio spectrum is a scarce resource and the use of competitive bidding will ensure that the entity that values the spectrum the most will be able to obtain the license. Also, because of the partitioning proposal that SWBT and others have placed on the record in this proceeding, the potential exists that there will be multiple WLL providers operating in a given license area.

For the reasons SWBT has consistently set forth during the course of this proceeding, SWBT asks that the Commission allocate the 2390-2400 MHz spectrum band, paired with the 2300-2310 MHz spectrum band, for the exclusive use of wireless local loop. This proposal was supported by more than three times the number of parties supporting any of the other proposed applications for this spectrum. This allocation will clearly provide the greatest benefit to the public and will allow the Commission to meet its stated objective in this proceeding.

If you have any questions, please let me know.

Sincerely,



cc: Chairman Hundt
Commissioner Ness
Commissioner Quello
Commissioner Barrett
Commissioner Chong
Mr. Rudy Baca
Ms. Lauren Belvin
Mr. James Casserly
Ms. Jill Luckett
Ms. Ruth Milkman
Mr. David Siddall
Mr. Robert Pepper
Mr. Mark Corbitt
Mr. Don Gips
Mr. Greg Rosston
Mr. Tom Stanley
Mr. John Williams
Mr. Richard Smith
Mr. Larry Petak
Mr. Steve Sharkey
Ms. Gina Keeney
Mr. Larry Atlas
Mr. John Cimko
Mr. Dan Phythyon
Mr. Michael Wack